

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>113466:EJH:rd</b>	<b>FOR FURTHER ACTION</b>		see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. <b>PCT/AU2004/001427</b>	International filing date ( <i>day/month/year</i> ) <b>15 October 2004</b>	(Earliest) Priority Date ( <i>day/month/year</i> ) <b>17 October 2003</b>	
Applicant <b>ACTIVE AIR SUSPENSIONS LIMITED et al.</b>			

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of **5** sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

#### Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.
2. ☐ **Certain claims were found unsearchable** (See Box No. II).
3. ☐ **Unity of invention is lacking** (See Box No. III).
4. With regard to the **title**,  

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:
5. With regard to the **abstract**,  

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. With regard to the **drawings**,  
  - a. the figure of the **drawings** to be published with the abstract is Figure No. **1**  

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.
  - b. ☐ none of the figures is to be published with the abstract.

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**Box No. IV Text of the Abstract (Continuation of item 5 of the first sheet)**

A vehicle suspension control for a vehicle having each wheel (11) supported from the chassis of the vehicle through a fluid operated extension element (13, 19), the control comprising a controller (27), a plurality of sensors (21, 23, 25, 27, 30, 32), a fluid flow controller (29), a first sensor (21) adapted to sense the relative position between the wheel (11) and the chassis and provide a first output to the controller, a second sensor (23) adapted to sense the pressure of the fluid in each extension element (13, 19) and provide a second output to the controller (27) adapted to receive the output from each of the sensors (21, 23) at each wheel, process the outputs and provide a wheel output to the fluid flow controller (29) for each wheel, the force applied by the extension elements (13, 19) between the chassis and wheels will maintain the attitude of the chassis substantially constant relative to a plane.

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001427

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. <sup>7</sup>: B60G 17/015, 17/056, 21/06, 21/067, 21/073, 21/08, 23/00; F16F 9/50

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI and key words VEHICLE, CAR etc., ACTIVE, CONTROL etc., COMPUTER, ELECTRONIC etc., FLUID, LIQUID etc., LEVEL, ATTITUDE etc.

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5119297 A (BUMA et al.) 2 June 1992 Whole document	1-9, 11-12, 14-17, 21-22, 24-33, 35-37
X	US 5088761 A (TAKEHARA et al.) 18 February 1992 Whole document	1-9, 11-12, 14-17, 21-22, 24-33, 35-37
X	US 4468050 A (WOODS et al.) 28 August 1984 Whole document	1-6, 8-9, 11

☒ Further documents are listed in the continuation of Box C☒ See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
11 November 2004

Date of mailing of the international search report

22 NOV 2004

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001427

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6000702 A (STREITER) 14 December 1999 Whole document	1-6, 8-9, 11
X	US 4717172 A (ASAMI et al.) 5 January 1988 Whole document	1-6

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001427

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US	5119297	JP	2231213	EP	0386623		
US	5088761	JP	2303913	EP	0398311		
US	4468050	CA	1217863	EP	0080291	EP	0133589
		JP	58110311	JP	60191807	US	4468739
		US	4634142	US	4722548		
US	6000702	EP	0894053	DE	19615737	WO	9739905
US	4717172	EP	0190696	JP	61178210	JP	61178211
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.							
END OF ANNEX							

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